

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
29 January 2004 (29.01.2004)

PCT

(10) International Publication Number  
**WO 2004/010678 A1**

(51) International Patent Classification<sup>7</sup>: **H04M 3/493, 1/64, G06F 17/20, 19/00**

(21) International Application Number: **PCT/AU2003/000939**

(22) International Filing Date: **24 July 2003 (24.07.2003)**

(25) Filing Language: **English**

(26) Publication Language: **English**

(30) Priority Data:  
2002950336 24 July 2002 (24.07.2002) AU

(71) Applicant (*for all designated States except US*): **TELSTRA NEW WAVE PTY LTD [AU/AU]; 242 Exhibition Street, MELBOURNE, Victoria 3000 (AU).**

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **LAW, Eng, Boon**

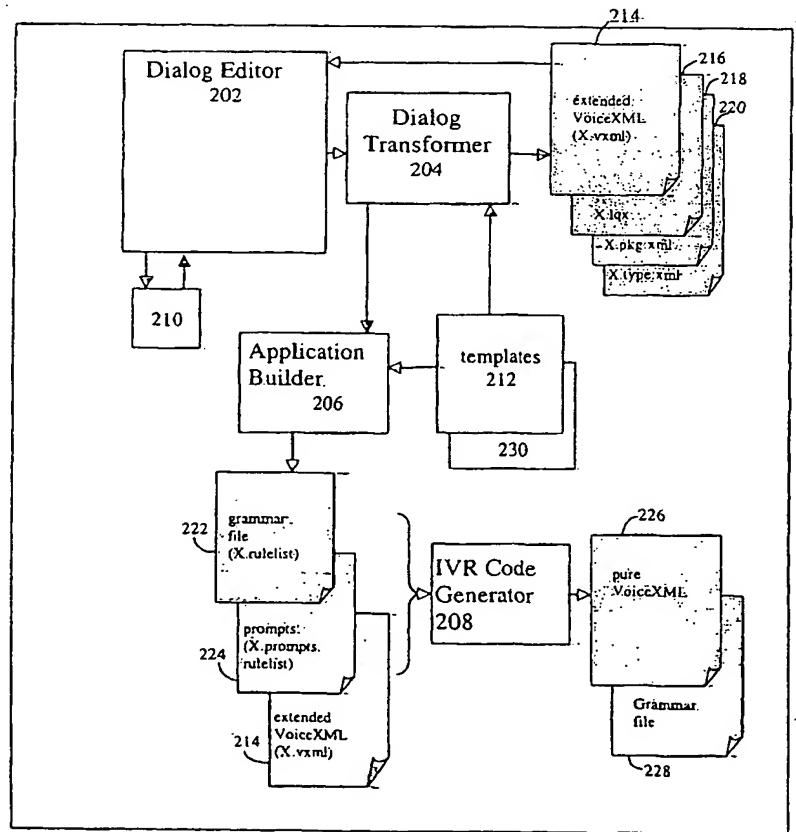
[MY/AU]; 7 Ardene Court, HAWTHORN, Victoria 3122 (AU). HO, Khanh, Thi, Phuong [AU/AU]; Unit 4, 900 Station Street, BOX HILL NORTH, Victoria 3129 (AU). HUI, Alvaro, Kau, Kam [AU/AU]; 18 Kelvinside Drive, TEMPLESTOWE, Victoria 3106 (AU). STARKIE, Bradford, Craig [AU/AU]; 52 Boisdale Street, SURREY HILLS, Victoria 3127 (AU).

(74) Agents: **WEBBER, David, Brian et al.; DAVIES COLLISON CAVE, 1 Little Collins Street, MELBOURNE, Victoria 3000 (AU).**

(81) Designated States (*national*): **AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.**

*(Continued on next page)*

(54) Title: SYSTEM AND PROCESS FOR DEVELOPING A VOICE APPLICATION



(57) Abstract: A system for use in developing a voice application, including a dialog element selector for defining execution paths of the application by selecting dialog elements and adding the dialog elements to a tree structure, each path through the tree structure representing one of the execution paths, a dialog element generator for generating the dialog elements on the basis of predetermined templates and properties of the dialog elements, the properties received from a user of the system, each of said dialog elements corresponding to at least one voice language template, and a code generator for generating at least one voice language module for the application on the basis of said at least one voice language template and said properties. The voice language templates include VoiceXML elements, and the dialog elements can be regenerated from the voice language module. The voice language module can be used to provide the voice application for an IVR.